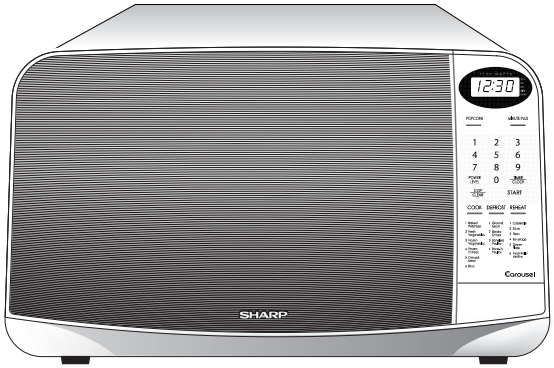
SHARP SERVICE MANUAL

S5406R305HPD/

MICROWAVE OVEN



MODEL R-305HD

In the interest of user-safety the oven should be restored to its original condition and only parts identical to those specified should be used.

WARNING TO SERVICE PERSONNEL: Microwave ovens contain circuitry capable of producing very high voltage and current, contact with following parts may result in a severe, possibly fatal, electrical shock. (High Voltage Capacitor, High Voltage Power Transformer, Magnetron, High Voltage Rectifier Assembly, High Voltage Harness etc..)

This is a supplemental Service Manual for Model R-305HD. This mode is quite similar to base models R-305HK/R-305HW. Use this supplemental manual together with the Base Model Service Manual (Refer No. is S2304R305HPW/) for complete operation, service information, etc..

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

(a) Do not operate or allow the oven to be operated with the door open.
(b) Make the following safety checks on all ovens to be serviced before activating the magnetron or other microwave source, and make repairs as necessary: (1) interlock operation, (2) proper door closing, (3) seal and sealing surfaces (arcing, wear, and other damage), (4) damage to or loosening of hinges and latches, (5) evidence of dropping or abuse.
(c) Before turning on microwave power for any service test or inspection within the microwave generating compartments, check the magnetron, wave guide or transmission line, and cavity for proper alignment, integrity, and connections.
(d) Any defective or misadjusted components in the interlock, monitor, door seal, and microwave generation and transmission systems shall be repaired, replaced, or adjusted by procedures described in this manual before the oven is released to the owner.
(e) A microwave leakage check to verify compliance with the Federal Performance Standard should be performed on each oven prior to release to the owner.

BEFORE SERVICING

Before servicing an operative unit, perform a microwave emission check as per the Microwave Measurement Procedure outlined in this service manual.
If microwave emissions level is in excess of the specified limit, contact SHARP ELECTRONICS CORPORATION immediately @1-800-237-4277.

If the unit operates with the door open, service person should 1) tell the user not to operate the oven and 2) contact SHARP ELECTRONICS CORPORATION and Food and Drug Administration's Center for Devices and Radiological Health immediately.

Service personnel should inform SHARP ELECTRONICS CORPORATION of any certified unit found with emissions in excess of 4mW/cm^2. The owner of the unit should be instructed not to use the unit until the oven has been brought into compliance.

SCHEMATIC
NOTE: CONDITION OF OVEN
1. DOOR CLOSED
2. CLOCK APPEARS ON DISPLAY

NOTE: "★" indicates components with potential above 250V.

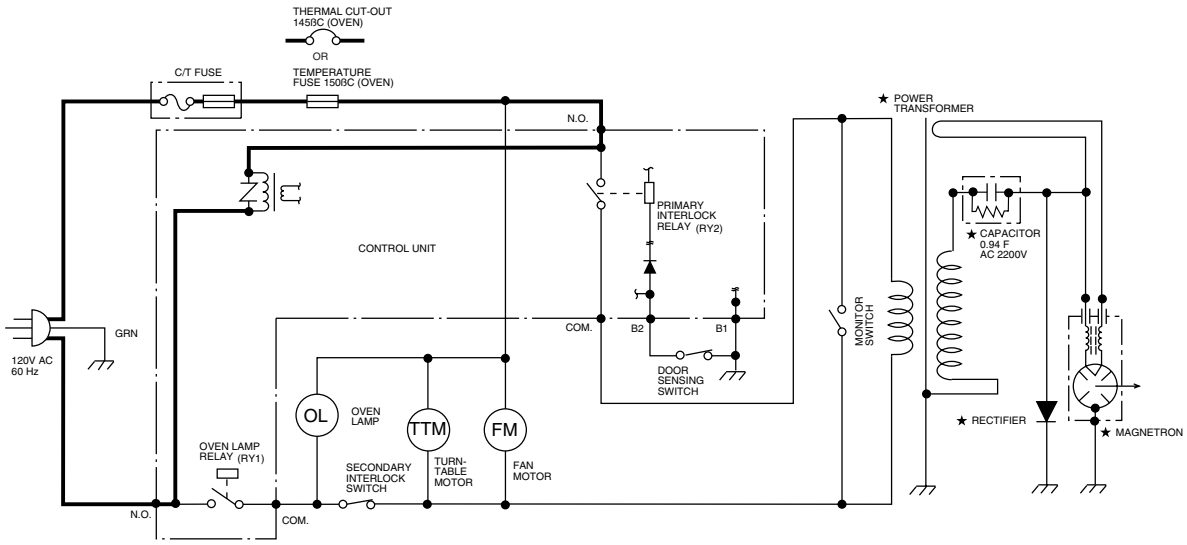


Figure O-1. Oven Schematic-Off Condition

SCHEMATIC
NOTE: CONDITION OF OVEN
1. DOOR CLOSED
2. COOKING TIME PROGRAMMED
3. VARIABLE COOKING CONTROL "P-HI" (100%)
4. "START" PAD TOUCHED

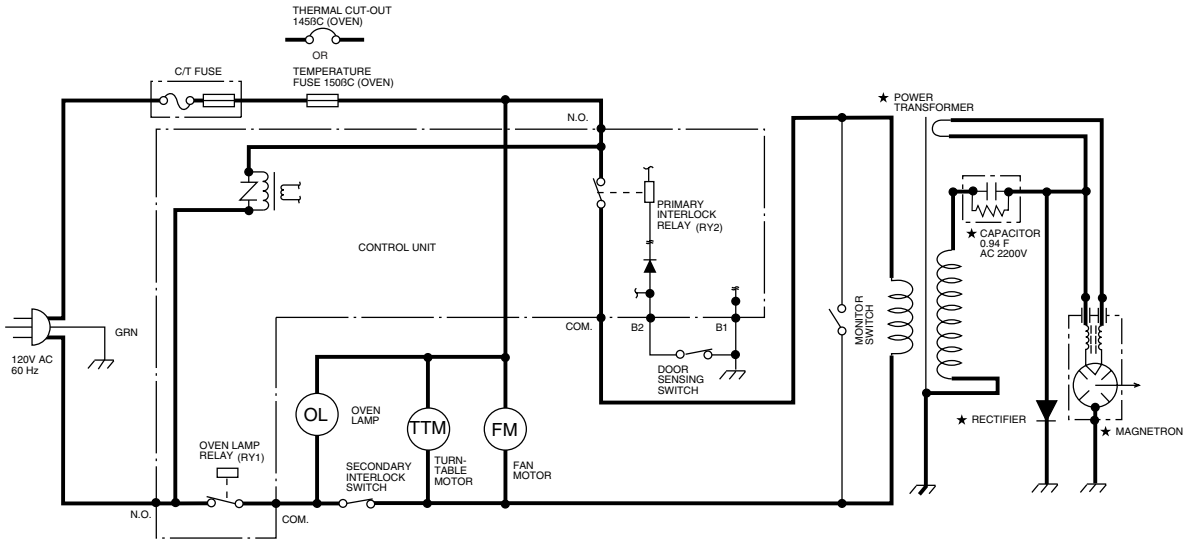


Figure O-2. Oven Schematic-Cooking Condition

TEST PROCEDURES

PROCEDURE LETTER	COMPONENT TEST

B **POWER TRANSFORMER TEST**

1. Disconnect the power supply cord, and then remove outer case.
2. Open the door and block it open.
3. Discharge high voltage capacitor.
4. Disconnect the primary input terminals and measure the resistance of the transformer with an ohmmeter. Check for continuity of the coils with an ohmmeter. On the R x 1 scale, the resistance of the primary coil should be less than 1 ohm and the resistance of the high voltage coil should be approximately 102 ohms (RTRN-705WRZZ)/ approximately 122 ohms (RTRN-715WRZZ); the resistance of the filament coil should be less than 1 ohm.
5. Reconnect all leads removed from components during testing.
6. Reinstall the outer case (cabinet).
7. Reconnect the power supply cord after the outer case is installed.
8. Run the oven and check all functions.

(HIGH VOLTAGES ARE PRESENT AT THE HIGH VOLTAGE TERMINAL, SO DO NOT ATTEMPT TO MEASURE THE FILAMENT AND HIGH VOLTAGE.)

E **TEMPERATURE FUSE (OVEN) TEST**

1. Disconnect the power supply cord, and then remove outer case.
2. Open the door and block it open.
3. Discharge high voltage capacitor.
4. A continuity check across the temperature fuse terminals should indicate a closed circuit unless the temperature of the temperature fuse reaches approximately 302˚F(150˚C).
   An open temperature fuse indicates overheating of the oven, exchange the temperature fuse and check inside of oven cavity and for improper setting of cooking time or operation of control unit. Check for restricted air flow through the vent holes of the oven cavity, especially the cooling fan and air guide.
5. Reconnect all leads removed from components during testing.
6. Reinstall the outer case (cabinet).
7. Reconnect the power supply cord after the outer case is installed.
8. Run the oven and check all functions.

THERMAL CUT-OUT (OVEN) TEST

1. Disconnect the power supply cord, and then remove outer case.
2. Open the door and block it open.
3. Discharge high voltage capacitor.
4. A continuity check across the thermal cut-out terminals should indicate a closed circuit unless the temperature of the thermal cut-out reaches approximately 293˚F(145˚C).
   An open thermal cut-out indicates overheating of the oven, exchange the oven thermal cut-out and check inside of oven cavity and for improper setting of cooking time or operation of control unit. Check for restricted air flow through the vent holes of the oven cavity, especially the cooling fan and air guide.
5. Reconnect all leads removed from components during testing.
6. Reinstall the outer case (cabinet).
7. Reconnect the power supply cord after the outer case is installed.
8. Run the oven and check all functions.

PARTS LIST

Note: The parts marked "Δ" may cause undue microwave exposure.
The parts marked "*" are used in voltage more than 250V.

	REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
			ELECTRIC PARTS		
	1-1	QSW-MA147WRZZ	Secondary interlock switch / door sensing switch	2	AG
	1-2	FFS-BA034WRKZ	C/T fuse(150deg.C/20A) and monitor switch (D3V-1G-2C25) assembly	1	AS
	1-3	FACCDA103WREZ	Power supply cord	1	AQ
	1-3	FACCDA083WRE0	Power supply cord (Interchangeable)	1	AQ
	1-3	FACCDA085WREZ	Power supply cord (Interchangeable)	1	AQ
*	1-4	FH-DZA112WRKZ	High voltage rectifier assembly	1	AR
*	1-4	FH-DZA075WRK0	High voltage rectifier assembly(Interchangeable)	1	AR
*	1-4	FH-DZA109WRKZ	High voltage rectifier assembly(Interchangeable)	1	AR
*	1-5	RC-QZA211WRE0	High voltage capacitor	1	AV
*	1-5	RC-QZA286WRZZ	High voltage capacitor (Interchangeable)	1	AV
	1-6	RMOTEA346WRE0	Fan motor	1	AV
	1-6	RMOTEA356WRE0	Fan motor (Interchangeable) for production use	1	--
	1-7	RTHM-A119WRE0	Thermal cut out 145C(oven)	1	AK
	1-7	QFS-TA014WRE0	Temperature fuse 150deg.C (oven) (Interchangeable)	1	AG
	1-8	RLMPTA082WRZZ	Oven lamp	1	AL
	1-8	RLMPTA085WRZZ	Oven lamp (Interchangeable)	1	AH
	1-9	RMOTDA252WRZZ	Turntable motor	1	AM
	1-9	RMOTDA211WRE0	Turntable motor(Interchangeable)	1	AS
	1-9	RMOTDA186WRE0	Turntable motor (Interchangeable)	1	AW
*	1-10	RTRN-A715WRZZ	Power transformer	1	BH
*	1-10	RTRN-A705WRZZ	Power transformer (Interchangeable)	1	BK
Δ*	1-11	RV-MZA288WRE0	Magnetron	1	BK
Δ*	1-11	RV-MZA321WRZZ	Magnetron (Interchangeable)	1	BH
			CABINET PARTS		
	2-1	GCABUA883WRPZ	Outer case cabinet	1	BF
	2-2	GDAI-A360WRWZ	Bottom plate	1	AS
	2-3	GLEGPA074WRE0	Foot	4	AC
			CONTROL PANEL PARTS		
	3-1	CPWBFA858WRKZ	Control unit assembly	1	BQ
	3-2	HPNLCB804WRFZ	Control panel frame	1	AS
	3-3	PSHEPA912WRZZ	Graphic sheet	1	AW
	3-4	XETSD40P08000	Screw : 4mm x 8mm	2	AB
	3-5	JBTN-B241WRFZ	Open button	1	AG
	3-6	MSPRCA050WRE0	Button spring	1	AB
			OVEN PARTS		
Δ	4-1	PHOK-A131WRFZ	Latch hook	1	AL
	4-2	LBNDKA163WRPZ	Capacitor holder	1	AK
	4-3	NFANJA020WRE0	Fan blade	1	AG
Δ	4-4	**********	Oven cavity (Not a replacement part)	1	--
	4-5	MLEVPA233WRF0	Switch lever	1	AG
	4-6	PCUSGA620WRPZ	Cushion	1	AF
	4-7	PCOVPA394WREZ	Waveguide cover	1	AK
	4-8	PDUC-A833WRPZ	Air duct	1	AM
	4-9	PDUC-A832WRWZ	Fan duct	1	AP
	4-10	PPACGA176WREZ	TTM packing	1	AC
	4-11	PCUSGA399WRE0	Cushion	1	AF
	4-12	PCUSUA278WRP0	Cushion	4	AB
	4-13	PCUSUA235WRP0	Cushion	1	AE
	4-14	PCUSGA614WRPZ	Cushion	1	AE
	4-15	PCUSGA615WRPZ	Cushion	1	AE
	4-16	MROD-A019WREZ	Chassis support	1	AN
	4-17	PCUSGA616WRPZ	Cushion	1	AK
			DOOR PARTS		
Δ	5-1	FDORFA364WRTZ	Door panel	1	AS
	5-2	PSHEPA382WRE0	Sealer film	1	AH
Δ	5-3	GWAKPA897WRFZ	Door frame	1	AX
	5-4	HPNL-A801WRRZ	Door screen	1	AU
Δ	5-5	LSTPPA188WRF0	Latch head	1	AG
	5-6	MSPRTA187WRE0	Spring	1	AC
Δ	5-7	GCOVHA450WRFZ	Choke cover	1	AG
	5-8	XEPSD40P08000	screw: 4mm x 8mm	2	AB

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
		MISCELLANEOUS		
6-1	FROLPA101WRKZ	Turntable support	1	AR
6-2	NTNT-A117WREZ	Turntable	1	AS
6-3	FW-VZB968WREZ	Main wire harness	1	AT
6-4	TCAUAA268WRRZ	DHHS caution label	1	AF
6-5	TCAUAA280WRRZ	Monitor caution	1	AF
6-6	TINSEA973WRRZ	Instruction book	1	AP
		SCREWS,NUTS AND WASHERS		
7-1	XHPSD40P08K00	Screw : 4mm x 8mm	2	AA
7-2	LX-CZA070WRE0	Special screw	2	AC
7-3	LX-CZA073WRE0	Special screw	2	AC
7-4	LX-CZ0052WRE0	Special screw	2	AA
7-5	LX-EZA042WRE0	Special screw	2	AB
7-6	XHPSD30P06000	Screw : 3mm x 6mm	1	AA
7-7	XHPSD40P08000	Screw : 4mm x 8mm	5	AA
7-8	XHTSD40P08RV0	Screw : 4mm x 8mm	4	AA
7-9	XHTSD40P12RV0	Screw : 4mm x 12mm	1	AA
7-10	XOTSD40P08000	Screw : 4mm x 8mm	13	AA
7-11	XOTSE40P08000	Screw : 4mm x 8mm	1	AA
7-12	XHTSD40P08000	Screw : 4mm x 8mm	1	AA

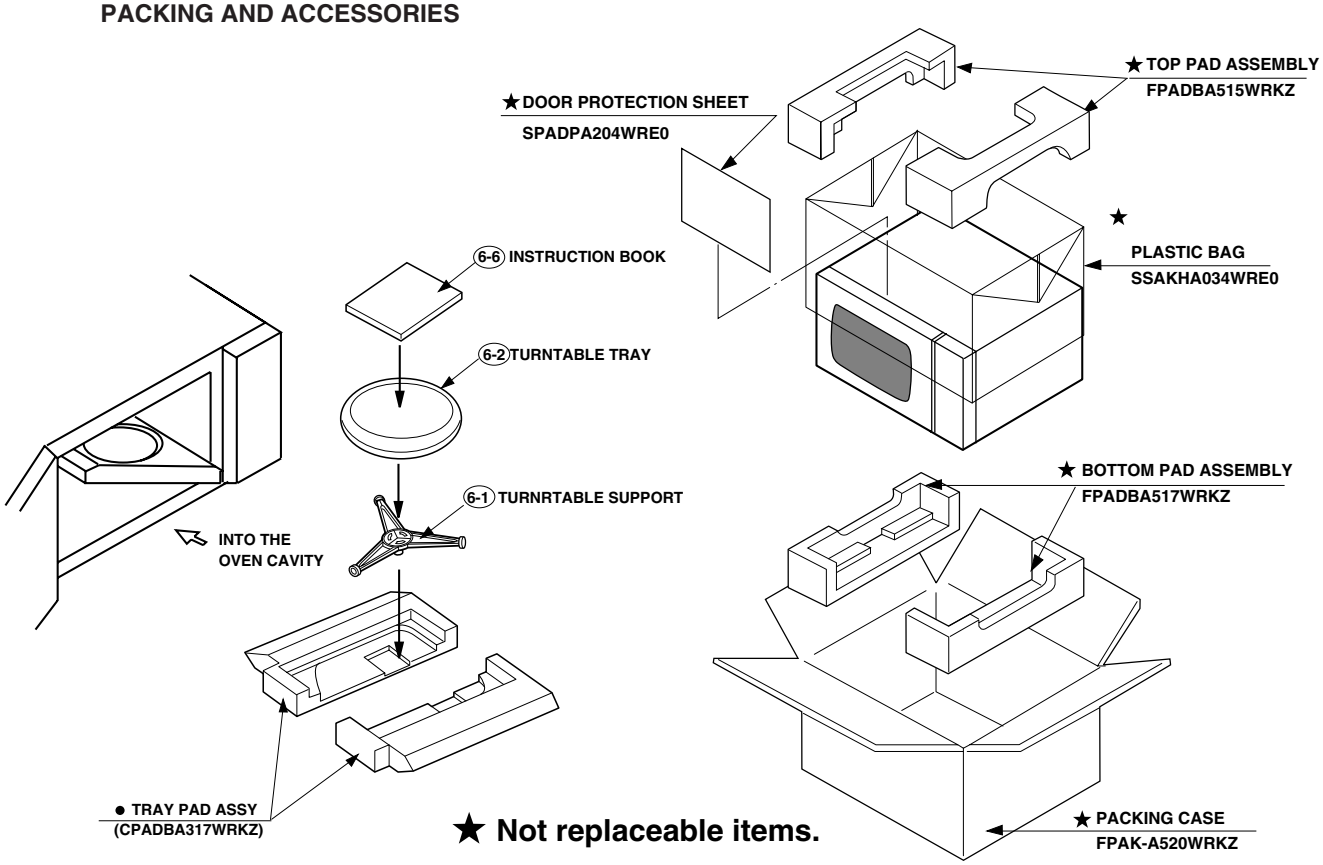
HOW TO ORDER REPLACEMENT PARTS

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER 2. REF. NO. 3. PART NO. 4. DESCRIPTION

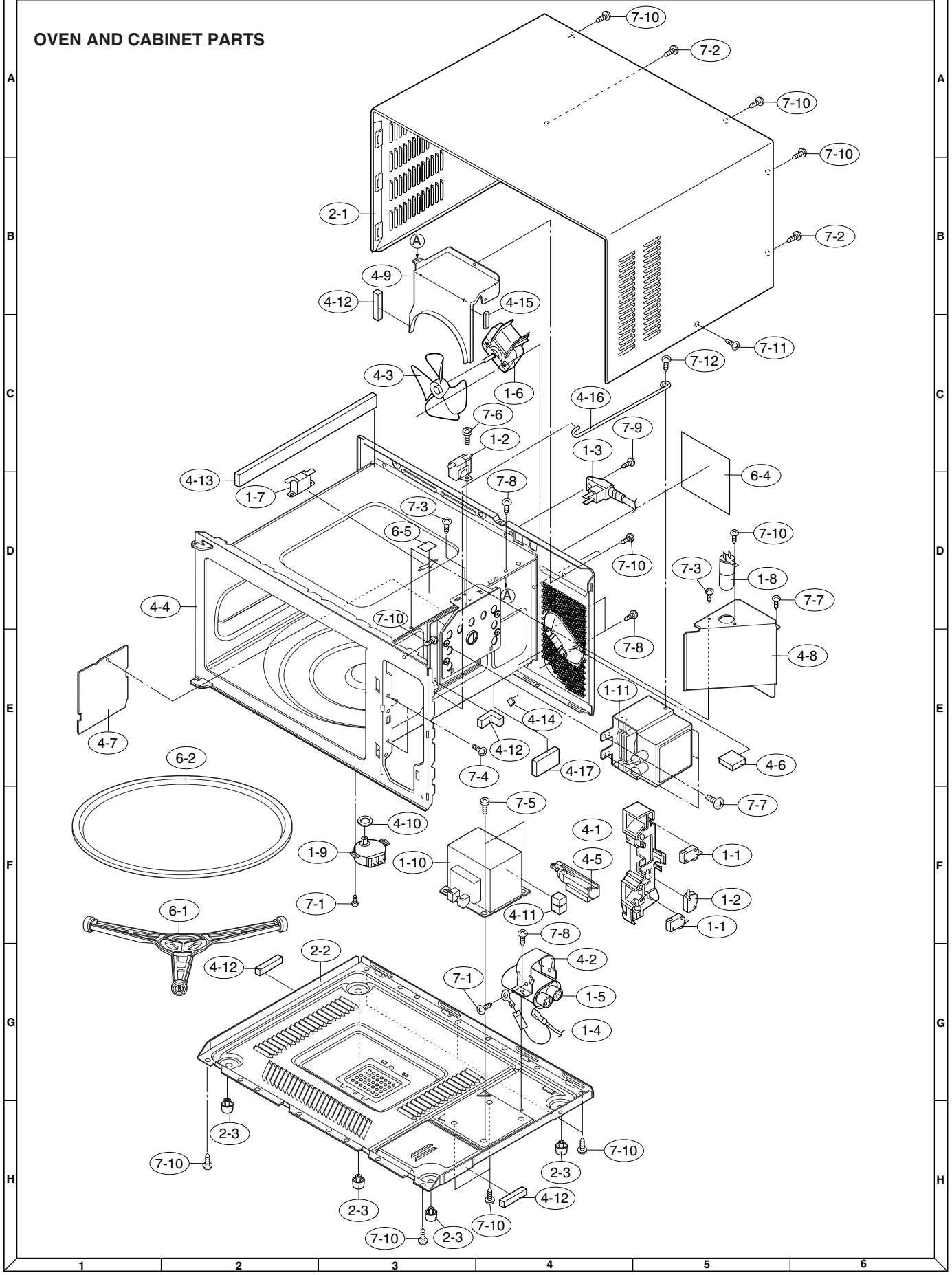
Order Parts from the authorized SHARP parts Distributor for your area.
Defective parts requiring return should be returned as indicated in the Service Policy.

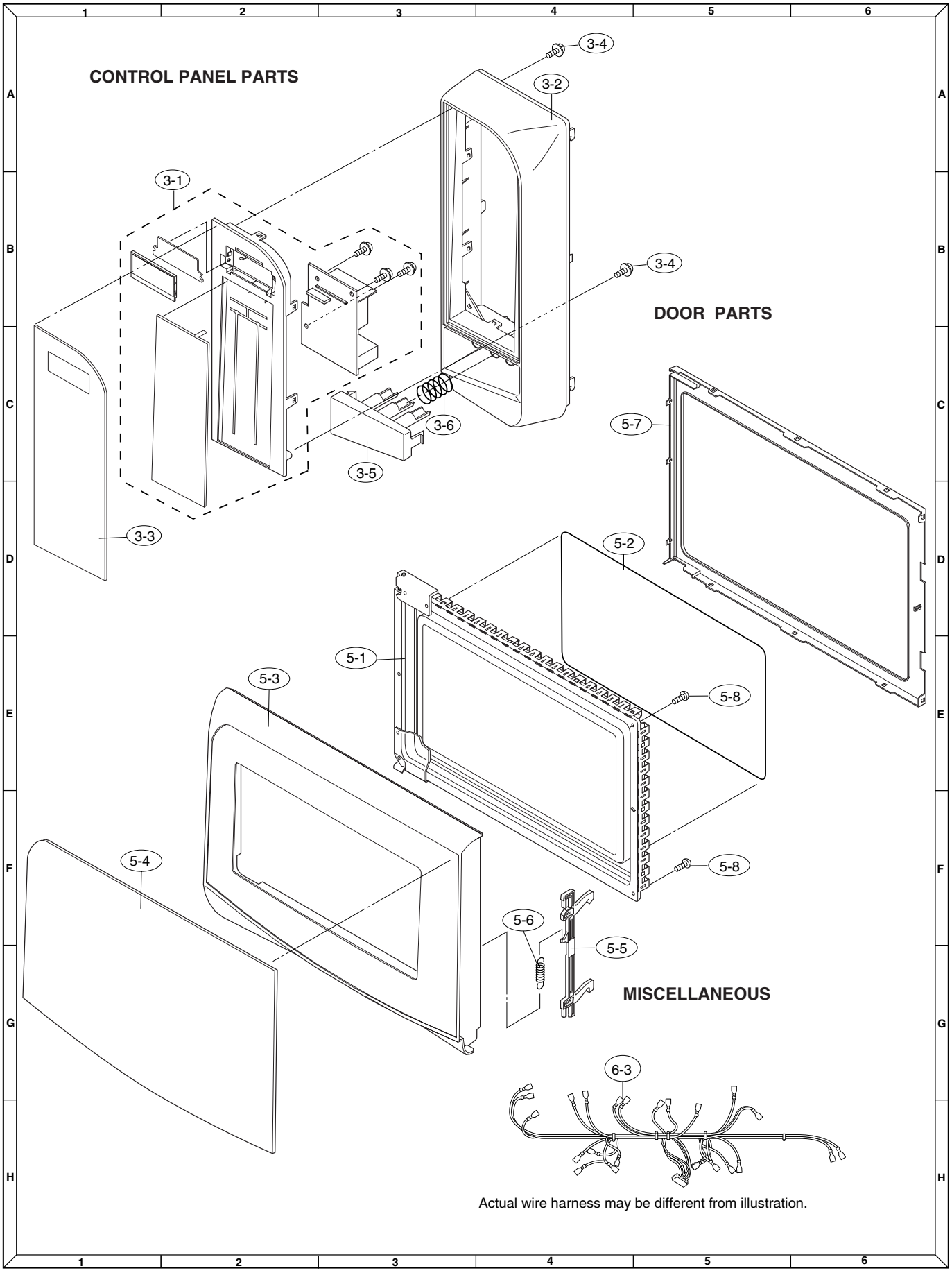
PACKING AND ACCESSORIES



★ Not replaceable items.

OVEN AND CABINET PARTS





Actual wire harness may be different from illustration.

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